XXI.—Notices of British Fungi. By the Rev. M. J. Berkeley, F.R.S., and C. E. Broome, Esq., F.L.S.

[Continued from ser. 5, vol. vii. p. 131.]

**Agaricus (Lepiota) cristatus.

A beautiful form occurred in a fern-case at Blackheath, exactly according with Krombholz's t. 25. f. 26-30. It had not the strong smell of the ordinary form.

1927. A. (Tricholoma) Schumacheri, Fr. Hym. Eur. p. 69;

Fl. Dan. t. 2267. fig. 1.

In a hothouse, Apethorpe, Norths. Found once only; agreeing very closely with the figure in Fl. Dan., especially as regards the gills.

1928. A. (Tricholoma) porphyroleucus, Fr. Hym. Eur.

p. 75.

Coed Coch, Oct. 1881. The long-stemmed form. 1929. A. (Clitocybe) incilis, Fr. Hym. Eur. p. 94. Shrewsbury, W. Phillips.

*A. (Clitocybe) obsoletus, Batsch, fig. 103.

Hothorpe, Norths., Nov. 23, 1881, Miss R. Berkeley.

Just the plant of Batsch, but the odour varying from that of bitter almonds to that of anisced. The term obsoletus used by Batsch does not refer to an odour less than that of A. fragrans, but to the pallid tint as compared with his A. obsolescens.

*A. (Mycena) coharens, A. & S. p. 163.

Coed Coch. Amongst pine-leaves in great perfection. It has much affinity with A. balaninus, B.; but that has the margin of the gills purple. They have, however, the same fulvous bristles on the surface.

1930. A. (Mycena) excisus, Lasch, in Linn, viii. no. 538.

Hothorpe, Norths., Miss Ruth Berkeley.

Magnificent specimens of this species occurred Nov. 17, 1881, in the above locality. Pileus 3 inches across, stem 4 inches high, root 2 inches long. The specimens were either solitary or subcaspitose; gills purplish, strongly cut out behind. The fig. Bull. t. 518 I is more characteristic of the specimens than that in Fries's 'Icones,' taken from smaller and probably more superficial individuals.

*A. (Omphalia) buccinalis, Sow. t. 107.

This is certainly no form of A. umbelliferus; and it is too fleshy to be the same as A stellatus. It is, as Sowerby says, not uncommon, and is in great perfection this Jan. 8, 1882.

It has the habit of A. ptychophyllus, Cd., a species not

noticed by Fries; but the gills are not plicate.

1931. A. (Omphalia) † directus, B. & Br. Albus, gracillimus, pileo gomphiformi apice plano, stipite ascendente versus basin pilis longis vestito; lamellis longe decurrentibus.

On dead leaves, Chiselhurst, Nov. 1865. Stem slightly rufous, thread-like, not an inch high. The same species was

sent by G. W. Smith, May 4, 1870.

1932. A. (Pleurotus) pantoleucus, Fr. Ic. t. SS. fig. 2.

Blown out of a tree at Coed Coch during the great gale of Oct. 14, 1881. Exactly the plant of Fries, of which a drawing was originally sent from Sweden under the name of A. spodoleucus, Ic. t. 87. fig. 1.

1933. A. (Pleurotus) revolutus, Kickx, p. 158.

On a poplar tree, Penzance, T. Pengelly. J. Ralfs (no.

367).

A magnificent Agaric, clearly that of Kickx, but considered by Fries a form of A. salignus. It is clearly the same with A. corticatus, Saund. & Sm. t. 4. fig. 2. The stem is short. but distinct and swollen.

1934. A. (Pleurotus) limpidus, Fr. Ic. t. SS. fig. 3.

Penzance, J. Ralfs.

1935. A. (Entoloma) lividus, Fr. Hym. Eur. p. 189. East Dereham, Norfolk, the Rev. J. M. Du Port.

1936. A. (Entoloma) Batschianus, Fr. Hym. Eur. p. 191. Coed Coch, Oct. 1881, Miss Ruth Berkeley. Spores rather

irregular, 0003 inch in diameter.

1937. A. (Entoloma) bulbigenus, B. & Br.; A. Persoonianus, Phill. Gard. Chron. 1881, p. 874; A. sericeus, Pers. Ic. et Descr. t. 6. f. 2.

East Dereham, Rev. J. M. Du Port. Sibbertoft, Norths., Feb. 1882, Miss Ruth Berkeley. Just the plant of Persoon, who indicates in his figure the sclerotioid bodies at the base, though he does not mention them in the text. The name of A. Personianus requires to be changed, as there is a species of similar name. Fr. Hym. Eur. p. 25. Spores 0004 to ·0005 inch in diameter.

1938. A. (Entoloma) speculum, Fr. Hym. Eur. p. 197. Coed Coeh, Oct. 1881. Spores irregular, 0005 inch in diameter.

1939. A. (Pholiota) verruculosus, Lasch, Fr. Hym. Eur. p. 221.

King's Cliffe. A subspecies, according to Fries, of A. squarrosus.

*A. (Pholiota) caperatus, P. Syn. p. 293.

Var. macropus, Fr. Hym. Eur. p. 215.

King's Cliffe.

[†] Non tuba directi, non æris cornua flexi.—Ov. Met.

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1940. A. (Pholiota) dissimulans, B. & Br. Pileo primum erebio, campanulato obtusissimo vix viscidulo hygrophano demum explanato albido, margine involuto; stipite deorsum incrassato candido, basi gossypino; annulo erecto ut plurimum persistente; lamellis pallidis argillaceis sinuato-adnatis demum decurrentibus.

On sticks of hawthorn and sloe. Hothorpe, Miss R.

Berkelev.

Pileus at first of the colour of A. erebius, but at length becoming pale and expanded, about 1 inch across. Stem fistulose, with transverse dissepiments. Gills at length decurrent. It ought perhaps to be recorded in the section Tubaria, which, however, is a purely artificial division, and the ring is against this. It must be placed at the head of the hygrophanous Pholiotae, though it is not allied to the species in that division.

*A. (Inocybe) Bongardi, Fr. Myc. Eur. p. 229.

Coed Coch, 1881. Spores bulging on one side, as in Eunotia, 0005 inch long.

*A. (Inocybe) flocculosus, B. Eng. Fl. v. p. 97.

Coed Coch, Oct. 1881. Spores irregular, '0003 inch in diameter, sometimes slightly elongated.

*A. (Inocybe) scabellus, Fr.

Hothorpe, Miss R. Berkeley, Nov. 23, 1881, with A. scaber.

This does not seem to be a common species; but we were glad to get it again, as it enables us to ascertain that it has granulated spores, like A. fastigiatus.

1941. A. (Inocybe) casariatus, Fr. Hym. Eur. p. 234. Coed Coch, Oct. 1881. Spores even, '0004 long.

1941 bis. A. (Hebeloma) senescens, Batsch, fig. 197.

Amongst fir trees, Gwrwch Castle, exactly resembling the figure of Batsch, which does not seem to have been noticed

by Fries.

Pileo e convexo explanato leviter glutinoso ochracco-fulvo, extremo margine subtiliter tomentoso albo; stipite primum deorsum bulboso fusco, dein, excepto apice candido tomentoso, squamuloso, solido; lamellis confertis primum pallidis adnexis, dein cinnamomeis; carne alba, odore acri.

Sometimes semiglobose; stem 5 inches high, always dark

below; pileus 3 inches or more in diameter.

1942. A. (Hebeloma) subcollariatus, B. & Br. Pileo convexo subcarnoso pallido centro subfusco leviter glutinoso, velo floccoso evanescente; stipite farcto demum subtiliter fistuloso basi brunneo pulverulento; lamellis ventricosis secedentibus collarium breve interruptum formantibus argillaceis acie candidis.

On naked soil, Sibbertoft, Oct. 1881; about an inch in diameter. Allied to A. mesophæus, of which we were at first inclined to consider it a variety. Spores elliptic, uninucleate, '0005 inch long.

*A. (Hebeloma) firmus, P. Ic. et Desc. tab. 5. figs. 3, 4.

This appears to be a very variable species. The figure in the 'Icones' does not accord in several respects with the characters in Hym. Eur. The pileus is neither campanulate nor umbonate, but at length depressed. An Agaric, certainly referable to this species, occurred at Hothorpe, Norths., Feb. 8, 1882, in which, though the essential characters are the same, the pileus is at first of a deep brown, but hygrophanous, changing to tan-colour. The stem obviously though minutely scaly; the gills adnate with a minute decurrent tooth, at first pale, then argillaceous, their margin distinctly edged with snow-white particles.

1943. A. (Flammula) vinosus, Bull. t. 54.

Abundant on the Morfa, Conway, Miss R. Berkeley. A very interesting species which has scarcely been gathered since the time of Bulliard. Spores pale umber, '0002 inch long, shortly ovate.

1944. A. (Flammula) astragalinus, Fr. Hym. Eur. p. 248. Sent from Glamis by the Rev. J. Stevenson, in whose specimens the flesh was intensely red, and when bruised, as described by Fries, became black. Perhaps the most beautiful of Agarics.

1945. A. (Flammula) apicreus, Fr. Hym. Eur. p. 249.

Coed Coch, 1881. Very acrid.

1945 bis. A. (Naucoria) lugubris, Fr. Hym. Eur. p. 253. Coed Coch. A single specimen only, in a mountain-fir wood.

Spores very irregular, '0002 to '0003 inch long, subglobose. 1946. A. (Naucoria) melinoides, Fr. non Bull., excepta 560. fig. 1 F, the other figures belonging to A. hypnorum.

Kew, Dr. Cooke. Spores elliptic, '0006 inch long, with

one or two nuclei.

1947. A. (Naucoria) sideroides, Bull. t. 588.

Amongst moss, Sibbertoft, Nov. 10, 1881. Spores '0004 to '0005 inch long, half as much wide. This and the two neighbouring species, though externally resembling each other, have very different spores.

1948. A. (Naucoria) cerodes, Fr. Hym. Eur. p. 257.

Amongst moss, Sibbertoft, Sept. 23, 1881. Spores '0003 inch long.

1949. A. (Crepidotus) epigæus, Pers. Syn. p. 377; A. depluens, Batsch, fig. 122.

On the clay of the marlstone, Hothorpe, Nov. 10, 1881, Miss Ruth Berkeley. The spores of this species are oblong, '0004 inch long, not irregular, and more or less angular, as in the plant usually referred to A. depluens, as figured by Hoffmann; so that its affinities seem rather to be with Crepidotus

than Claudopus.

The present is exactly the plant of Batsch; and we think it better to leave the name with what has formerly been considered his species, and retain that of Persoon. A. depluens occurred in 1881, on sawdust, at Coed Coeh, just as it is figured by Hoffmann. It has sometimes a distinct stem, as we have ourselves found it. The gills in A. epigeus are no longer red when dry.

1950. A. (Hypholoma) lacrymabundus, Fr. Ic. 134. fig. 1. The species figured in the 'Icones' occurred last October at Coed Coch and near Hereford. What has usually passed under this name is A. velutinus, P. We find the spores '0003-'0004 inch long, in A. pyrrhotrichus '0005-'0006.

*A. (Hypholoma) cascus, Fr. Hym. Eur. p. 294. What we described in the "Notices" as an abnormal state of A. ap-

pendiculatus is undoubtedly this species.

1951. A. (Hypholoma) pilulaformis, Bull. t. 112.

Penzance, Mr. Ralfs. This is possibly a veil-bearing state of the very common A. spadiceus, though Fries says "velum etiam primitus absolute nullum." We are inclined rather to consider it the young of A. hydrophilus, Bull. t. 511; still we think it right to record its occurrence in Cornwall. We do not suppose with Fries that it has any thing to do with Bolbitius.

1952. A. (Psilocybe) hebes, Fr. Hym. Eur. p. 303.

On grass by the side of a chestnut-plantation amongst dead

leaves. Hothorpe, Miss R. Berkeley, Nov. 19, 1881.

Not exactly the form figured by Fries in the 'Icones,' as the stem is taller; but the colour of the hygrophanous pileus is the same exactly, the spores atropurpureous. Pileus at first obtuse; but in drying it becomes spuriously and minutely umbonate. Spores '0007 inch long.

*A. (Psathyra) corrugis, P. Syn. p. 424.

Shanklin. The short form figured by Corda in Sturm's Deutschl. Fl. under the name of A. vinosus.

1953. A. (Psathyra) gossypinus, Bull. t. 425. fig. 2. Coed Coch, Oct. 1881. Spores '0004 to '0005 long. 1954. A. (Psathyra) nolitangere, Fr. Hym. Eur. p. 309.

Amongst moss. Sibbertoft, Sept. 3, 1881. Spores 00055 long, more clongated than in A. gossypinus. A. pennatus, Quélet, = A. semivestitus, B. & Br.

1955. A. (Psathyra) microrhizus, Laseh, no. 468.

On the naked soil. Sibbertoft, Sept. 3, 1881. Gregarious, varying in size from a few lines to $1\frac{1}{4}$ inch, when it approaches the finer forms of A. gossypinus.

1956. A. (Psathyrella) trepidus, Fr. Syst. i. p. 238.

Hothorpe, Miss R. Berkeley. Pers. Myc. Eur. t. 29. fig. 1 is an excellent figure of this species.

**Coprinus aratus, B. Outl. p. 176.

A group of this fine species of large size occurred at Ho-

thorpe, Dec. 5, 1881.

As the character given before was drawn up from a solitary specimen gathered in a very different situation, it requires a little amendment. The disk is sometimes rugose, sometimes even; the gills are at first attached, but so slightly that they easily part from the stem, so as to appear free; but they are still connected at the base, as if there were a slight collar. For "lamellis liberis," "lamellis secedentibus" should be substistuted.

1957. C. alternatus, Fr. Hym. Eur. p. 327; Fl. Dan. 1961.

fig. 1.

East Dereliam, Rev. M. Du Port, at the same time with A. lividus.

This is searcely a Coprinus, but rather a Psathyrella.

1958. C. papillatus, Fr. Hym. Eur. p. 326. Shrewsbury, P. M. Berkeley. In a fern-case.

1959. Cortinarius (Phlegmacium) serarius, Fr. Hym. Eur. p. 350.

Glamis, Rev. J. Stevenson. A small form.

1960. C. (Dermocybe) cotoneus, Fr. Hym. Eur. p. 372.

Clifton, C. Bucknall.

1961. Paxillus Fagi, B. & Br. Eximie gregarius, crispus, sursum pallidus, subtus aurantius, lamellis crispatis aurantiis.

On a beech-stump. Coed Coch. Forming a wide crisped mass of great beauty, very different in appearance from P. panuoides, which is confined to fir wood or sawdust.

1962. Hygrophorus fusco-albus, Fr. Hym. Eur. p. 410.

Amongst moss. Gwrwch, 1881. Remarkable for its distinct floccose veil.

*Marasmius Wynnei, B. & Br.

A good figure of this beautiful species is given in 'Fungi Tridentini ' by Bresadola under the name of *Clitocybe xantho*phylla.

*M. scorteus, Fr. Hym. Eur. p. 468.

Penzance, J. Ralfs.

1963. Polyporus Michelii, Fr. Hym. Eur. p. 533.

Penzance, J. Ralfs.

1964. P. acanthoides, Fr. Hym. Eur. p. 540.

Penzance, J. Ralfs.

1965. P. pectinatus, Kl. in Linn. viii. p. 485; Fr. Hym.

Eur. p. 559.

Penzance, J. Ralfs. We follow Fries, though with some hesitation, in considering the European forms figured by Quélet identical with the Indian species. It cannot, however, be referred either to P. salicinus or P. conchatus.

1966. P. velutinus, Fr. Syst. i. p. 368.

Penzance, J. Ralfs, who has also sent P. hirsutus.

1967. P. mucidus, Fr. Hym. Eur. p. 577.

Penzance, J. Ralfs. On the under surface of very decayed firs.

1968. Dædalea cinerca, Fr. Syst. i. p. 336.

Penzance, J. Ralfs.

The thick substance separates this from every form of D. unicolor, also the inciso-strigose surface of the pileus.

1969. Hydnum Weinmanni, Fr. Hym. Eur. p. 613.

Penzance, J. Ralfs.

1970. H. aureum, Fr. Hym. Eur. p. 613.

Penzance, J. Ralfs. A fine species, with a merulioid aspect. 1971. H. denticulatum, P. Myc. Eur. ii. p. 181.

Penzance, J. Ralfs.

1972. Irpex carneus, Fr. Hym. Eur. p. 622.

Penzance, J. Ralfs. When perfect it is a true Irpex.

1973. Phlebia lirellosa (P.), Dædalea lirellosa, P. Myc. Eur. iii. p. 2, tab. xvii. figs. 2, 3.

Penzance, J. Ralfs. This is not noticed by Fries in Hym.

Eur.; but it is very distinct.

*Stereum vorticosum, Fr. Hym. Eur. p. 639.

Noble specimens of this very beautiful species, remarkable for its costate hymenium, were sent from Penzance by Mr. Ralfs, who is in a position in Cornwall to send many more novelties.

1974. Corticium umbrinum, A. & S. p. 281. Penzance, J. Ralfs; Hothorpe, Feb. 1882.

1975. C. maculæforme, Fr. Hym. Eur. p. 656.

Penzance, J. Ralfs.

*Sparassis crispa, Fr. Syst. i. p. 465.

Penzance, J. Ralfs.

This seems to be a southern species, not having occurred in this country north of Norfolk.

1976. Clavaria pyxidata, P. Comm. t. i. fig. 1.

Penzance, J. Ralfs.

1977. Calocera corticalis, Fr. Hym. Eur. p. 681; Batsch, fig. 162.

Penzance, J. Ralfs.

1978. Penicillium macrosporum, B. & Br. Aurantiaeum, sporis globosis maximis.

On a decaying Lactarius, J. D. C. Sowerby, whose drawing

is in the collection of the British Museum.

1979. Cercaspora Bloxami, B. & Br. Maculis orbicularibus pallidis; sporis elongato-fusiformibus utrinque acuminatis multiseptatis.

On decaying leaves of turnips. Twycross, Rev. A.

Bloxam. Formerly distributed as Septoria Bloxami.

1980. Ovularia elliptica, B. & Br. Gard. Chron. 1881, ii. p. 340 cum icone.

On various lilies. Spores .0012 long.

1981. O. syringæ, B. Gard. Chron. 1881, ii. p. 665 cum icone.

On leaves of *Syringa*, Aberdeenshire, A. Stephen Wilson. 1982. *Mystrosporium alliorum*, B. Gard. Chron. 1878.

On onions. Culver, Exeter.

1983. Puccinia oxyriæ, Buch. White, MSS.

On leaves of Oxyria reniformis. Ben Blabhein, Skye, Dr. Buchanan White, Sept. 1881. Spores, including the short hyaline stem, '0024 inch long; the divisions of the head subglobose, even.

1984. Glæosporium Lindemuthianum, Saccardo, Fung. It.

1032.

On pods of *Phaseolus*. Very destructive at Sibbertoft in 1881.

1985. Leotia chlorocephala, Schwein. Syn. p. 88.

Hampshire, Miss Broadwood. The tint of green is so dark that it is nearly black, so that the house-painters might call it invisible green. L. atrovirens, P., occurred at Coed Coch in Sept. 1881; but it is clearly merely a state of Geoglossum viride, which accompanied it. The specimens agreed in every respect with the figure in Myc. Eur. t. 9. figs. 1–3.

1986. Sphæria leprosa, P.

Penzance, J. Ralfs. Spores '0008 inch long, narrow.

* Valsa cratægi, Currey.

On dead twigs. Spores 0012 long.

1987. Spharia aggregata, Lasch in Kl. Herb. Myc. ii. no. 541; Fuckel, no. 977.

On Euphrasia officinalis. Penzance, J. Ralfs.

1988. Didymium effusum (Lk.).

On fronds of hart's tongue. W. G. Smith.